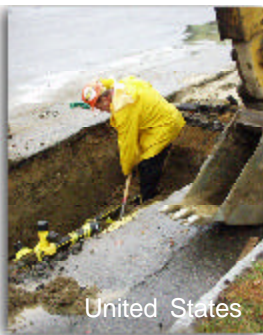


GSSI

Geophysical Survey Systems, Inc.



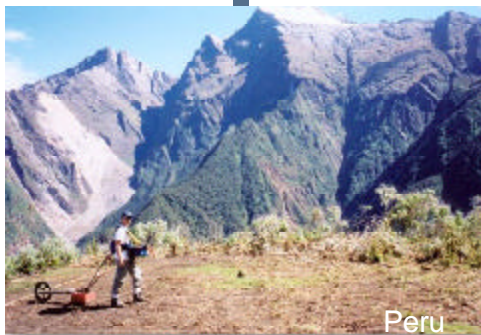
Egypt



United States



Italy



Peru



England



Canada

Instruments for the
non-destructive inspection
of the earth and the infrastructure

We Provide Complete Survey Solutions

Information People Can UseSM



World Leader

Geophysical Survey Systems, Inc., “GSSI”, is the world leader in the development and manufacture of commercial ground penetrating radar (GPR) systems. The company also designs and manufactures Electromagnetic Induction Instruments (EMI).

GPR and EMI systems are used to non-destructively explore the subsurface of the ground or man made materials. We provide our customers high quality, productive tools and services to solve their subsurface detection problems.

The company also manufactures custom equipment for specific applications. GSSI sells systems to countries on every continent through a worldwide network of support representatives.

Research & Development

GSSI is the manufacturer of the world’s finest Ground Penetrating Radar Systems. GSSI’s leadership in subsurface radar development is a consequence of its creation of the first commercial GPR system and the innovation and dedication of its technical staff, who are continually using state-of-the-art technologies to advance the utility and value of the instruments. Current R & D projects - such as the development of a GPR system for a future Mars Rover mission - keep us on the leading edge. GSSI also collaborates on projects with leading universities and national laboratories.

Manufacturing Capabilities

GSSI manufactures all GPR Systems, EMI instruments, antennas and accessories at its 30,000 square foot facility in New Hampshire. All systems are assembled and tested in-house. To assure repeatable and reliable system performance and conduct a wide range of feasibility studies for potential customer applications, GSSI has developed its own application specific test facilities.

GPR Discoveries Around the World

GSSI equipment is used daily by our customers around the world in applications ranging from concrete investigation to archaeology mapping for historic preservation.

A few of the more notable surveys and discoveries made with our equipment have included:

- Discovery of the Woolly Mammoth in Siberia, showcased in a TV special on the Discovery Channel.
- Discovery of an Inca village in Peru (National Geographic special).
- Survey of Springwood, home of President Franklin D. Roosevelt in Hyde Park, NY.



Geophysical survey on the ceiling of the Battistero, in Florence, Italy.



SIRveyor SIR-20

The SIR-20 revolutionizes the GPR industry by combining a rugged, powerful data collection unit and a laptop PC with GSSI's Windows™-based RADAN NT post processing data software. The system features two hardware channels for up to 4 data channels which allows the user maximum flexibility for data acquisition.

The SIR-20 provides unsurpassed data quality from the lowest signal-to-noise ratio of any other GPR system on the market.

The SIR-20 also allows the operator to collect data in single line mode or collect data specifically for 3D format, making data processing quick and easy.



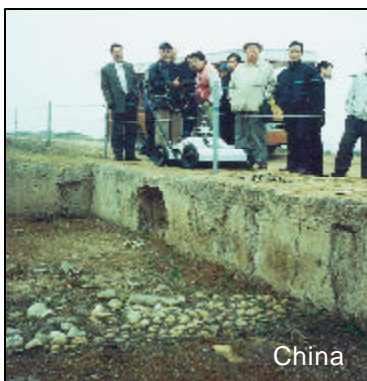
TerraSIRch SIR-3000

The SIR-3000 is the newest GPR product from the world leader in Ground Penetrating Radar. This rugged, high-performance, single-channel radar system provides unrivaled scan rates with low noise.

This system is affordable, small and designed for easy single-user operation. The SIR-3000 features a high-resolution screen that is easily readable in daylight.



PathFinder



The PathFinder system is ideal for complex geophysical situations and closely spaced utilities. It features 2 transmitters and 4 receivers for multiple polarizations. PathFinder 3D data acquisition software automatically inputs X and Y coordinates of the survey area to easily and quickly assemble 3D radar images.

The PathFinder comes standard with a 400 MHz antenna; optionally a 600 MHz or 900 MHz can also be purchased. The survey wheel is integrated into the system.

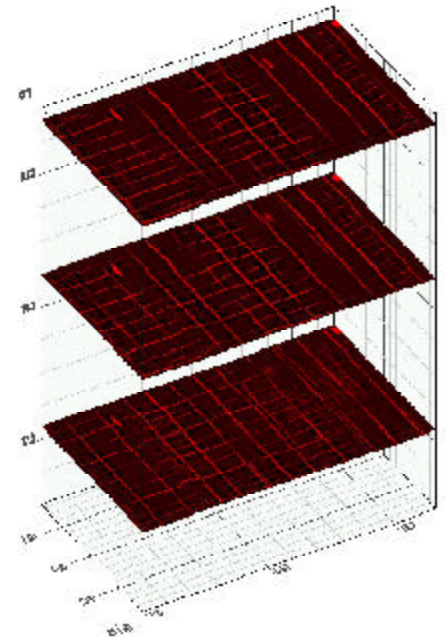


StructureScan

The StructureScan III system is the third and latest tool for the Non-Destructive Testing (NDT) of concrete structures.

Finally, a quick, easy, safe and effective way to locate buried obstructions in concrete structures prior to drilling, cutting or coring.

- Inspect walls, floors, decks, slabs, tunnels, balconies and garages.
- Locate rebar, tension cables, conduits, voids and measure slab thickness.
- Thousands of square feet of concrete can be inspected in a day.
- Locate targets to a depth of 18 inches.
- Detect and map the relative concrete condition for rehab planning.



3D depth slices showing tension cables (left-to right) draped over reinforcement at left, right and center. 7.5 x 11.5 m sq. (approx 930 sq. ft.).

UtilityScan

UtilityScan I complements the PathFinder as the best systems to locate and map utilities in 3D. UtilityScan I incorporates the SIR-3000, the newest lightweight, powerful and easy-to-use radar system from GSSI.

UtilityScan software allows for easy 3D file data collection, giving the user quick and reliable on-site 3D data without timely off-site post processing.

- Locate gas, water, electric and other existing utilities (metal or plastic).
- Rapid, single-person data collection, mark pipes in real time.
- Easy cart setup, breakdown and transport.

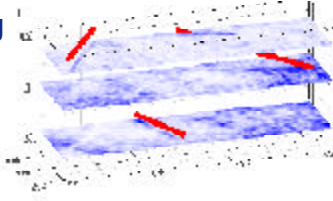


What Are You Looking For?

Ground Penetrating Radar (GPR) is the best technology to non-destructively investigate the earth and concrete structures.

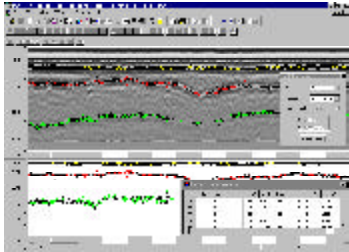
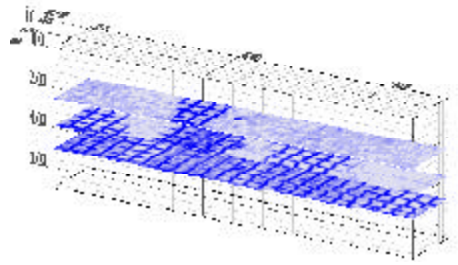
Utility Detection and Mapping

Knowledge of existing pipe locations prior to installing new pipes is essential.



Concrete Inspection and Evaluation

“Look” into concrete before drilling, cutting or coring.



Highway Inspection

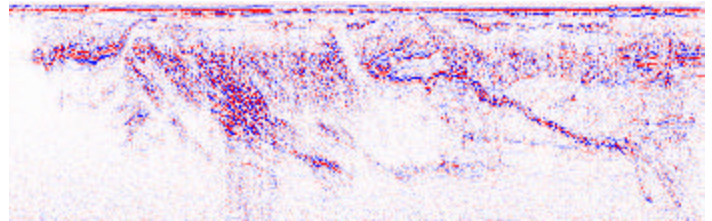
Highway inspection showing pipes with automatic detection of layers, base and sub-base pinpoints locations requiring maintenance.

Bridge Inspection

Quality Control of bridges. Find rebar, concrete and asphalt cover thickness and areas of deterioration.

Geology and Geophysics

Map stratigraphy of complex sedimentary sequences for geomorphological studies to improve pre-construction engineering design decisions.



Archaeology

Information from non-invasive GPR survey contributes to the creation of site strategies, conservation, preservation and, if necessary, accurate location of excavation units.

Rail Bed Inspection

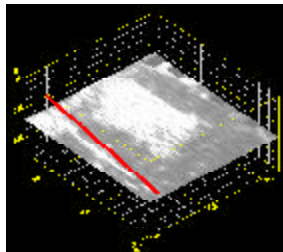
Map railroad ballast thickness and find leading pipes to prevent accidents.

Forensics/Law Enforcement

Identify and delineate areas of disturbed soils. Locate and map location of unmarked graves as well as locate tunnels.

Environmental Assessment

Locate buried Underground Storage Tanks (UST) and drums and other point sources of subsurface contamination.



Architectural Facade Inspection

Locate fractures, voids and embedded objects in important historical structures to maximize repair/restoration efforts.

Airport Inspection

Quality assurance inspections and void detection to prevent the unexpected.

Precision Farming

Conduct conductivity surveys to determine land suitability for farming.

Snow/Ice Thickness Measurement

Map snow and ice thickness and stratigraphy of continental and alpine glacial features.

Detecting Minerals / Mining

Locate hazards such as dikes, faults, and water-filled fissures as well as roof rock fracturing. Map coal seams and general stratigraphy. Locate abandoned underground mine workings. Locate and delineate mineral bearing hydrothermal veins and miarolitic cavities (gem-bearing cavities).



GSSI Antennas

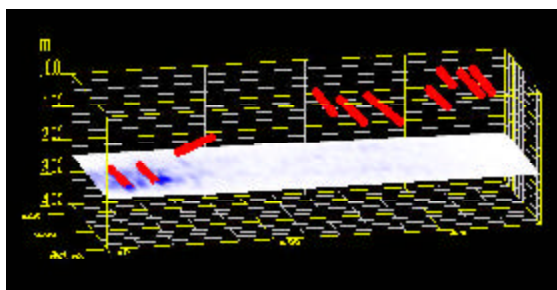
Accurate answers require high quality data, and the key to high quality GPR data is the performance of the antennas. GSSI has over 30 years experience in antenna design and manufacture, and has developed a wide range of antennas to meet the needs of a broad range of applications. Antennas are interchangeable with *any and all* SIR Systems.



GSSI Software

The World's Most Advanced and Easy-To-Use Ground Penetrating Radar Data Processing & Analysis Package

GSSI's line of post-processing software products operate under the Microsoft Windows environment. Data interpretation is improved and report writing time is reduced. A familiar user-friendly graphics interface and on-line help create an easy to learn and use program.



View it any way you like in 3D.
10 different ways to view data to
quickly interpret targets.

RADAN NT - the modular design has always let you select the processing functions best suited to your needs. Now RADAN for Windows NT has application-specific, add-on modules with more new features and capabilities:

QuickDraw Super 3D Module - combine multiple 3D files into one and combine two separate 3D files collected at 90 degrees.

Structure Identification Module - obtain C-scan 3D view with quick two-step processing.

Advanced Road Structure Assessment Module - collect data at highway speeds on roads, airport runways and rail beds.

Bridge Assessment Module - Quality Assurance checks of concrete cover and assessment of bridge deck condition.



Geophysical Survey Systems, Inc.
www.Geophysical.com

13 Klein Drive, North Salem, NH 03073-0097

Tel: (603) 893-1109 Fax: (603) 889-3984

Email: Sales@Geophysical.com